

# THE PREPAREDNESS POST

UTAH DEPARTMENT OF HEALTH

## Utah Upgrades Influenza Surveillance

*By Keegan McCaffrey*

When Epidemic Intelligence Service (EIS) officers from the Centers for Disease Control and Prevention (CDC) arrived in Utah the first week of February 2018, it became obvious Utah was in the midst of a particularly nasty influenza season. (The CDC says while flu is seen year-round, the flu season generally begins in October, typically between December and February. However, it can last until May.) By February, more than 1,300 influenza-associated hospitalizations had stretched Utah hospitals and clinics to their limit. Healthcare systems, news organizations, and the public were calling public health for information and guidance about the situation. Epidemiologists at the Utah Department of Health (UDOH) and local health departments knew 2018 was bad, but just how bad was it? And how could they best communicate that risk to the public? With these questions in mind, the Salt Lake County Health Department (SLCoHD) and UDOH requested a CDC Epi-Aid to perform a mid-season assessment of Utah influenza disease burden and severity to inform preparedness and response activities during a severe influenza season.

A team comprised of SLCoHD, UDOH, and CDC epidemiologists analyzed every possible way to measure influenza, from



**CDC Epi-Aid Team  
February 2018**

syndromic surveillance to influenza-like illness (ILI), laboratory results, and tweets about flu. They were looking for measures that were both timely (death data were no good because it took weeks to get death certificates) and stable over time (syndromic surveillance for influenza-like illness had changed too much during the year to be used). Once the best measures were selected, they implemented a new analytic tool called the Moving Epidemic Method (MEM), which had been used internationally and nationally to measure flu season severity, but never at the state or local level. The MEM takes into account past flu seasons and the highest values across selected measures to then create a model to classify current flu activity into low, moderate, high, and very high categories. These categories can be thought of like the risk of flooding, a moderate season would be expected every other year, a high season once every 10 years, and a very high season two out of every 100 years (a

(a 100 year flu season).

The results of the MEM assessment matched with how the 2018 flu season felt; it was a bad year. Overall, the flu season was rated by the model as “high.” By the end of the season in May when the team revisited the data, hospitalizations had moved into the “very high” category.

### In this issue:

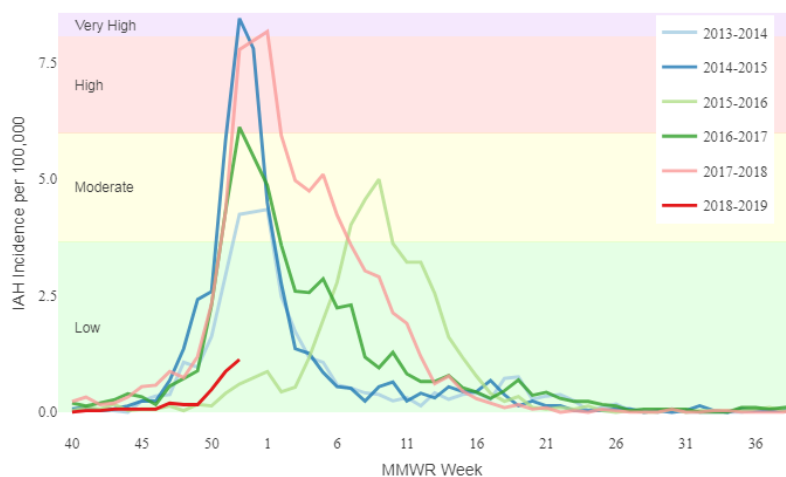
Utah Upgrades Influenza Surveillance	1-2
Iso-pod Training Features the Uintah Basin Healthcare Coalition	3
First Human Rabies Death in Utah Resident Since 1944	4
Exploring the Connection Between Human Health and Animal Health	5
Calendar	6-8

## Utah Upgrades Influenza Surveillance (continued)

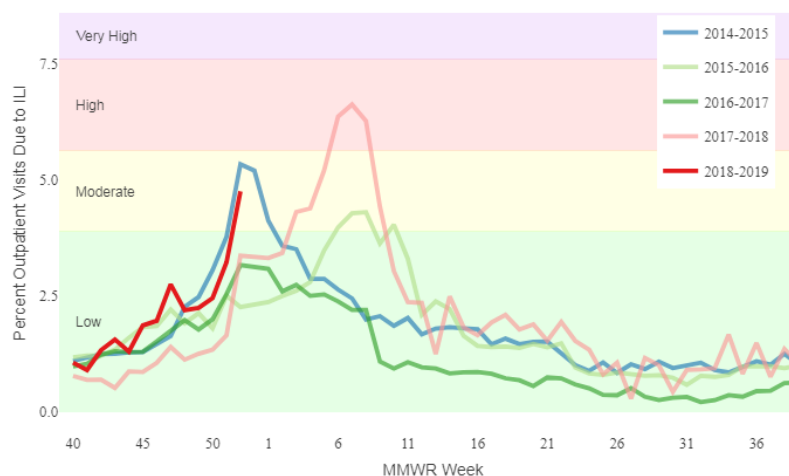
As a result of the effectiveness of using the MEM to predict flu season severity, the UDOH has incorporated the MEM into weekly flu surveillance reports. Current season severity data may be found on the UDOH influenza dashboard at <https://bit.ly/2s8SE1P>. Public health and healthcare partners can use this up-to-date influenza severity classification to help guide preparedness and response activities.

### Current MEM measures on the UDOH influenza dashboard

#### 2018-2019 Influenza-Associated Hospitalization (IAH) Weekly Incidence Rate



#### 2018-2019 Influenza-Like Illness Rate



### Three tips to prevent influenza

- The best way to prevent influenza is by getting a flu vaccine each year.
- Take preventive actions to stop the spread of germs. Wash your hands, cover your cough, and stay home from work or school when you are sick.
- Take influenza antiviral drugs if your doctor prescribes them.

## Iso-pod Training Features the Uintah Basin Healthcare Coalition


On September 20, 2018, healthcare and emergency response professionals from throughout the Uintah Basin met at Ashley Regional Medical Center in Vernal, Utah for a special training hosted by the Uintah Basin Healthcare Coalition. Gary Hall, of Global Preparedness, LLC, provided ISO-POD training.



An ISO-POD is a portable vinyl enclosure that creates a negative airspace to transport patients with biologically infectious diseases. The unit is used to quarantine an infected person in cases such as Ebola, influenza, or other highly contagious diseases.

It also allows first responders and medical staff to treat the patient without contaminating ambulances or areas passed within the hospital during transport. Thankfully, the ISO-POD can also be decontaminated and reused.

Those attending the training included representatives from Jensen Fire, Gold Cross Ambulance, Ashley Regional Medical Center, Uintah Basin Healthcare, TriCounty Health Department, Bureau of Land Management, Uintah School District nurses, and other area partners.








[BeReadyUtah.gov](http://BeReadyUtah.gov)  
 Family Preparedness Series

## 12 Areas of Emergency Preparedness

1. Shelter and Fire
2. Water
3. Food
4. Sanitation and Hygiene
5. Light and Power
6. First Aid
7. Communications

8. Safety and Security
9. Clothing, Tools, and Personal Items
10. Cooking
11. Important Documents and Money
12. Transportation

 Make a Plan
  Get a Kit
  Be Informed
  Get Involved



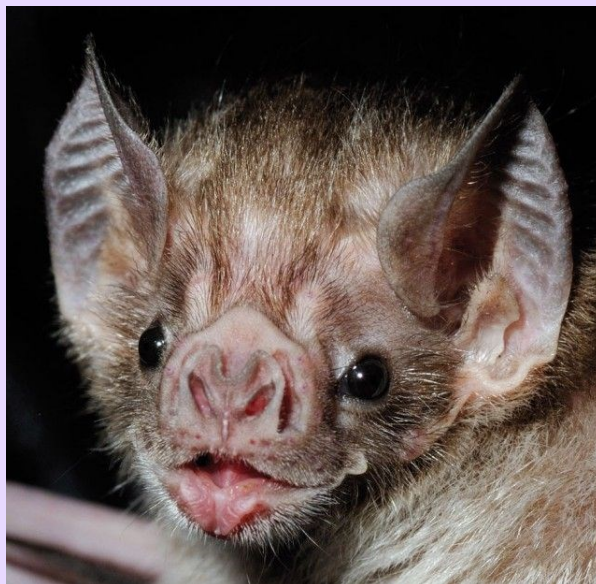
[dem.utah.gov](http://dem.utah.gov)

## First Human Rabies Death in Utah Resident Since 1944

*By Bree Barbeau*

In November 2018, the Utah Department of Health (UDOH) was notified of a suspect human rabies case in a Utah resident. Due to the complex nature of the response, UDOH staff initiated an Incident Command System (ICS) to coordinate response activities. ICS management principles were applied, such as setting clear objectives for investigation and communication, designating roles and responsibilities, and establishing regular status reports during coordination meetings in order to advance the response. In collaboration with the Central Utah Public Health Department, Utah County Health Department, Salt Lake County Health Department, the Centers for Disease Control and Prevention (CDC), Utah Public Health Laboratory (UPHL), Utah Office of Medical Examiner (OME), and healthcare partners, UDOH staff conducted a public health investigation. The purpose of the investigation was to verify the diagnosis of rabies, determine the source of the patient's infection, and identify possible risk to others.

Laboratory specimens from the UPHL and the OME were sent to the CDC which confirmed the case-patient was infected with a strain of rabies virus associated with the Mexican free-tailed bat. The public health investigation revealed the case-patient had handled several bats in the weeks prior to symptom onset but had not received post-exposure prophylaxis (PEP) following those exposure events. The case-patient was hospitalized and received supportive care, but subsequently died as a result of the rabies infection. Following the determination of the likely source of infection, public health made sure family members received PEP and worked with them to prevent bats from continuing to enter the home.



Public health and healthcare facilities conducted rapid risk assessments to identify and assess any community members and healthcare workers who were potentially exposed to the case-patient during the infectious period. When appropriate, recommendations were made for them to receive PEP. A total of 30 community members and 242 healthcare workers were evaluated by public health; of those, 30 community members and 74 healthcare workers were provided PEP for rabies. This case presented an opportunity to utilize an ICS structure for public health investigation and response efforts, educate healthcare providers and the public regarding the risk of rabies, and provide recommendations for rabies prevention.

Rabies is a preventable viral disease of mammals most often transmitted through the bite of a rabid animal. Transmission has been rarely documented through contamination of mucous membranes (i.e., eyes, nose, mouth), aerosol transmission, and corneal and organ transplants. The rabies virus infects the nervous system, ultimately causing disease in the brain and death, if post-exposure prophylaxis (PEP) is not appropriately administered. In the United States, human fatalities associated with rabies occur in people who fail to seek medical assistance following exposure to rabid animals, usually because they were unaware of their exposure or the danger. Because rabies is uniformly fatal once symptoms develop, exposed persons should be promptly evaluated for PEP. Bats are the primary carrier of rabies in Utah—an average of 15-25 bats test positive for rabies in Utah each year.

# Exploring the Connection Between Human Health and Animal Health

*by Dallin Peterson*

The fourth annual Utah One Health Symposium was held on November 2, 2018 at the scenic Conservation Garden Park Conference Center in West Jordan. Five years ago when the Utah Department of Health (UDOH) convened the first Rabies Compendium Conference to focus on rabies control and prevention in Utah, many recognized the need to collaborate and educate on a variety of related topics. The focus for the initial conference and subsequent conferences was increasing awareness, partnerships, and collaboration between human health, animal health, and environmental health.



The 2018 conference focused on the human/animal bond. As Dr. Bess J. Pierce, of the Lincoln Memorial University College of Veterinary Medicine, the keynote speaker said, "It's not all puppies, rainbows, and unicorns. Due to neoteny, animals play a significant role in the lives of humans." The plenary speaker, Dr. Aubrey Fine, a leading expert in the field of Human-Animal Interactions (HAI), described the difference and importance of assistance animals and emotional support animals, and what legal protections are provided for animals and owners. Attendees also learned about ticks and tick migration, tularemia in an organ donor, individuals experiencing homelessness

and their pets, the equine-human connection, kratom supplements and salmonella, bats and rabies, algae blooms and their conversion to bio-fuels, biomonitoring, and a day in the life of an Indian Health Service Officer.

As always, this conference serves as a great networking tool and enables health care workers to connect with related disciplines to ensure the health and happiness of people living in Utah!



## Calendar

## 2019 Training

Date	Event	Location	Information
January 15 8 a.m. to 5 p.m.	Personal Protective Measures for Biological Events (PPMB, PER-320)	Intermountain Center for Disaster Preparedness 8th Ave. "C" Street LDS Hospital 3rd Floor North	<b>FREE</b> <i>Requirements:</i> Students must register and bring a copy of their FEMA SID number to class. Register for your FEMA SID at: <a href="https://cdp.dhs.gov/femasid/register">https://cdp.dhs.gov/femasid/register</a> To Register: UTRAIN <b>Course #1063694</b> Barb Clark <a href="mailto:barb.clark@imail.org">barb.clark@imail.org</a> 801-408-7061
January 30-31 10:30 a.m. to 7 p.m.	Basic Public Information Officer Course	Utah State University Room 105 Lundstrom Hall 1255 E 1000 N Logan, UT 84322	<b>FREE</b> To Register: UTRAIN <b>Course #1011053</b> <a href="mailto:dpsdemtrainex@utah.gov">dpsdemtrainex@utah.gov</a> 801-538-3400
January 30-31 10:30 a.m. to 7 p.m.	ICS-300 Intermediate ICS for Expanding Incidents	Davis County Sheriff's Office 800 W State Street Farmington, UT 84025	<b>FREE</b> Prerequisites: IS-100 (ICS Introduction), IS-200 (ICS Basic), IS-700 (National Incident Management System), IS-800.B (National Response Framework). All of these courses are on-line independent study classes at <a href="http://training.fema.gov/is/crslist.asp">http://training.fema.gov/is/crslist.asp</a> <b>Course #1011051</b> <a href="mailto:dpsdemtrainex@utah.gov">dpsdemtrainex@utah.gov</a> 801-538-3400
February 5-6 10:30 a.m. to 7 p.m.	ICS-300 Intermediate ICS for Expanding Incidents	Bureau of Reclamation 302 E 1860 S Provo, UT 84606	<b>FREE</b> Prerequisites: IS-100 (ICS Introduction), IS-200 (ICS Basic), IS-700 (National Incident Management System), IS-800.B (National Response Framework). All of these courses are on-line independent study classes at <a href="http://training.fema.gov/is/crslist.asp">http://training.fema.gov/is/crslist.asp</a> <b>Course #1011051</b> <a href="mailto:dpsdemtrainex@utah.gov">dpsdemtrainex@utah.gov</a> 801-538-3400
February 13-14 10 a.m. to 6 p.m.	ICS-300 Intermediate ICS for Expanding Incidents	Salt Lake City Public Safety Building, Room A&B 475 S 300 E Salt Lake City, UT 84114	<b>FREE</b> Prerequisites: IS-100 (ICS Introduction), IS-200 (ICS Basic), IS-700 (National Incident Management System), IS-800.B (National Response Framework). All of these courses are on-line independent study classes at <a href="http://training.fema.gov/is/crslist.asp">http://training.fema.gov/is/crslist.asp</a> <b>Course #1011051</b> <a href="mailto:dpsdemtrainex@utah.gov">dpsdemtrainex@utah.gov</a> 801-538-3400



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Bureau of Emergency Medical Services and Preparedness

## Calendar

## 2019 Training

Date	Event	Location	Information
<b>February 27</b>  <b>11:30 a.m. to 1:30 p.m.</b>	Lunch & Learn: "911, what is your disaster?"	Intermountain Center for Disaster Preparedness 8th Ave. "C" Street LDS Hospital 3rd Floor North	<b>FREE</b> (Lunch provided) To Register: UTRAIN <b>Course #1082031</b> Barb Clark barb.clark@imail.org
<b>February 27-28</b>  <b>10 a.m. to 6 p.m.</b>  <b>10 a.m. to 2 p.m.</b>	ICS-400 Advanced ICS Command & General Staff-Complex Incidents	Salt Lake City PD Pioneer Precinct, Classroom C  1040 W 700 S Salt Lake City, UT 84104	<b>FREE</b> Prerequisites IS 100, 200, 700, 800, (taken on-line at <a href="http://training.fema.gov/is/crslist.asp">http://training.fema.gov/is/crslist.asp</a> ) and ICS 300 (classroom only). NOTE: ICS-300 must be completed 30 days prior to attending ICS-400. To Register: UTRAIN <b>Course #1011057</b> <a href="mailto:dpsdemtrainex@utah.gov">dpsdemtrainex@utah.gov</a> 801-538-3400
<b>March 1-March 9</b>  <b>7 p.m. to 11 p.m.</b>	Community Emergency Response Team (CERT) Train-the-Trainer Course	Scipio Community Center Main Street Scipio, UT 84656	<b>FREE</b> Must have taken the CERT Basic Training course To Register: UTRAIN <b>Course #1033034</b> Ken Kraudy kkraudy@utah.gov 801-538-3427
<b>March 6-7</b>  <b>10:30 a.m. to 7 p.m.</b>	ICS-400 Advanced ICS Command & General Staff-Complex Incidents	Wasatch County Search & Rescue/EOC 1361 S Hwy 40 Heber City, UT 84032	<b>FREE</b> Prerequisites IS 100, 200, 700, 800, (taken on-line at <a href="http://training.fema.gov/is/crslist.asp">http://training.fema.gov/is/crslist.asp</a> ) and ICS 300 (classroom only). NOTE: ICS-300 must be completed 30 days prior to attending ICS-400. To Register: UTRAIN <b>Course #1011057</b> <a href="mailto:dpsdemtrainex@utah.gov">dpsdemtrainex@utah.gov</a> 801-538-3400
<b>March 13-14</b>  <b>10 a.m. to 6 p.m.</b>	ICS-300 Intermediate ICS for Expanding Incidents	Salt Lake City Public Safety Building, Room A&B 475 S 300 E Salt Lake City, UT 84114	<b>FREE</b> Prerequisites: IS-100 (ICS Introduction), IS-200 (ICS Basic), IS-700 (National Incident Management System), IS-800.B (National Response Framework). All of these courses are on-line independent study classes at <a href="http://training.fema.gov/is/crslist.asp">http://training.fema.gov/is/crslist.asp</a> <b>Course #1011051</b> <a href="mailto:dpsdemtrainex@utah.gov">dpsdemtrainex@utah.gov</a> 801-538-3400



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## Calendar

## 2019 Training

Date	Event	Location	Information
<b>March 20-21</b> 10:30 a.m. to 7 p.m.	ICS-300 Intermediate ICS for Expanding Incidents	Carbon County Emergency Operations Center, Room 104 1551 E Airport Road Price, UT 84501	<b>FREE</b> Prerequisites: IS-100 (ICS Introduction), IS-200 (ICS Basic), IS-700 (National Incident Management System), IS-800.B (National Response Framework). All of these courses are on-line independent study classes at <a href="http://training.fema.gov/is/crslist.asp">http://training.fema.gov/is/crslist.asp</a> <b>Course #1011051</b> Justin Needles <a href="mailto:justin.needles@carbon.utah.gov">justin.needles@carbon.utah.gov</a> 435-636-3742
<b>March 26-27</b> 10:30 a.m. to 7 p.m.	Basic Public Information Officer Course	Sandy City Hall, Multipurpose Room 10000 Centennial Parkway Sandy, UT 84070	<b>FREE</b> To Register: UTRAIN <b>Course #1011053</b> <a href="mailto:dpsdemtrainex@utah.gov">dpsdemtrainex@utah.gov</a> 801-538-3400
<b>March 28-29</b> 10 a.m. to 6 p.m. 10 a.m. to 2p.m.	ICS-400 Advanced ICS Command & General Staff- Complex Incidents	Salt Lake City Public Safety Building, Room A&B 475 S 300 E Salt Lake City, UT 84114	<b>FREE</b> Prerequisites IS 100, 200, 700, 800, (taken on-line at <a href="http://training.fema.gov/is/crslist.asp">http://training.fema.gov/is/crslist.asp</a> ) and ICS 300 (classroom only). NOTE: ICS-300 must be completed 30 days prior to attending ICS-400. To Register: UTRAIN <b>Course #1011057</b> <a href="mailto:dpsdemtrainex@utah.gov">dpsdemtrainex@utah.gov</a> 801-538-3400



"No doubt you're asking yourself, what are hatches? And how the heck does one go about battering them down?"

Newsletter produced by Charla Haley



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